

Nathan Ochsner, Clerk

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## I. Background

According to Plaintiff's complaint, Stoller is the patentholder of the '833 Patent, entitled "Non-aqueous solution of plant-growth regulator(s) and polar and/or semi-polar organic solvent(s)," issued on October 23, 2018. (Doc. No. 1 at 5). The '833 Patent "relates to non-aqueous solutions of plant growth regulator(s) and polar and/or semi-polar organic solvents, methods for making said non-aqueous solution, and methods for improving the growth and crop productivity of plants using said non-aqueous solution." (Doc. No. 1-1, Ex. A, 1:18–22) ("'833 Patent"). As Stoller describes it, the patent is directed to formulations for solutions of plant growth regulators (PGRs) in organic solvents for application to crops and other plants.

On November 27, 2018, Stoller's counsel wrote to both Vivid, which marketed one of Fine's formulations under the brand "VIGEO," and CJB, the manufacturer of the formulation, asserting that VIGEO infringes on one or more claims of the '833 Patent. (Doc. No. 1, Ex. A & B). These allegations led to the instant lawsuit.

## II. Claim Construction Legal Standard

"It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Aventis Pharm., Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013) (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc)). The patent claims in issue must be construed as a matter of law to determine their scope and meaning. *See, e.g., Markman*, 517 U.S. at 390; *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1317 (Fed. Cir. 2007).

"There is a heavy presumption that claim terms are to be given their ordinary and customary meaning." *Aventis*, 715 F.3d at 1373 (first citing *Phillips*, 415 F.3d at 1312-13; and then citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Therefore,

courts must “look to the words of the claims themselves . . . to define the scope of the patented invention.” *Id.* (citations omitted); *see also Summit 6, LLC v. Samsung Elec. Co., Ltd.*, 802 F.3d 1283, 1290 (Fed. Cir. 2015). The “ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips*, 415 F.3d at 1313; *see also ICU Med., Inc. v. Alaris Med. Sys., Inc.*, 558 F.3d 1368, 1374 (Fed. Cir. 2009). This “person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Phillips*, 415 F.3d at 1313; *ICU*, 558 F.3d at 1374.

Intrinsic evidence is the primary resource for claim construction. *See Power-One, Inc. v. Artesyn Techs., Inc.*, 599 F.3d 1343, 1348 (Fed. Cir. 2010) (citing *Phillips*, 415 F.3d at 1312). For certain claim terms, “the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1314. For other claim terms, however, the meaning of the claim language may be less apparent. To construe those terms, the Court considers “those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean . . . [including] the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Id.*

The claims “provide substantial guidance as to the meaning of particular claim terms.” *Id.* The Court may consider the context in which the terms are used and the differences among the claims. *See id.* “Because claim terms are normally used consistently throughout the patent, the

usage of a term in one claim can often illuminate the meaning of the same term in other claims.” *Id.* Accordingly, since the claims “are part of a fully integrated written instrument,” the Court may also consider the specification and the patent’s prosecution history. *Id.* at 1315, 1317.

The Federal Circuit has instructed that there are two circumstances when a claim term is not entitled to its ordinary and customary meaning: (1) when a patentee acts as his or her own lexicographer and sets out a definition in the written description, or (2) when the patentee unmistakably disavows the full scope of the claim term either in the specification or during prosecution. *GE Lighting Sols., LLC v. AgiLight, Inc.*, 750 F.3d 13104, 1309 (Fed. Cir. 2014) (citing *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)). To disavow claim scope, the specification or prosecution history must “make[] clear that the invention does not include a particular feature” even though the language of the claims “might be considered broad enough to encompass the feature in question.” *Thorner*, 669 F.3d at 1366 (citation omitted). The disclaimer must be “clear and unmistakable.” *Comp. Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366, 1374-75 (Fed. Cir. 2008). The totality of the prosecution history informs the disavowal inquiry. *Id.* at 1379.

### **III. Construction of Disputed Terms**

This Court has carefully reviewed the ’833 Patent. It has also considered each side’s evidence and arguments presented in the claim construction briefing and at the *Markman* hearing. The Court has also reviewed and hereby applies the governing Federal Circuit authority. On this basis, the Court construes the following three ’833 Patent claim terms: “stable,” “various forms of zeatin,” and “other chemical formulations with cytokinin activity.”

A. Stable

The term “stable” is used in claims 1, 2, and 18 in the ’883 Patent. Claim 1 is illustrative of the use of the term: “A non-aqueous solution . . . wherein said non-aqueous solution is stable and said at least one organic solvent and said less than 5 wt. % water are the only solvents present in said non-aqueous solution.” ’833 Patent col. 12 ll. 49–67. The table below illustrates the parties’ positions on construction:

| <b>Stoller’s proposed construction</b>                                                                                                                                                                   | <b>Fine’s proposed construction</b>                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| preserves more biochemical activity compared to the traditional aqueous compositions according to the EPA’s November 16, 2012 Accelerated Storage Stability and Corrosion Characteristics Study Protocol | satisfies the EPA Stability Guidelines and excludes acid solubilizers, such as citric acid, tartaric acid, or glycolic acid |

The parties’ main dispute is whether Stoller disavowed “acid solubilizers, such as citric acid, tartaric acid, or glycolic acid” from its claim scope during prosecution of the patent. Fine argues that the prosecution history of the ’883 patent contains repeated, unambiguous disclaimers of acid solubilizers such as citric acid, tartaric acid, or glycolic acid. Stoller contends that the patent specification and prosecution history support its construction, and that Fine’s proposal creates ambiguity. Secondly, the parties disagree on whether a person of ordinary skill in the art (POSA) would understand the plain and ordinary meaning of “stable” to include a comparison to any other formation, a qualifier that Stoller’s proposed construction contains.

In this case, the prosecution history indicates that Stoller clearly and unambiguously disclaimed the full scope of the term “stable” during its patent prosecution by arguing that acid solubilizers such as citric acid, tartaric acid or glycolic make the claimed stable solution *unstable*. (See Doc. No. 74-4 at 36). There are two sets of office actions and subsequent responses that are pertinent to this inquiry. On March 22, 2017, before the term “stable” had been added to any

claims, the Examiner rejected claims 1–3, 6–9, 14, and 25 under 35 U.S.C. 102(a) as anticipated by the prior art Wang reference (US2008/039322)<sup>1</sup> (Doc. No. 74-3 at 35). The Examiner asserted that Wang disclosed all the claim features because “Wang et al. disclose a composition comprising a plant growth regulator and an acid solubilizer selected from the group consisting of citric acid, tartaric acid and glycolic acid.” (*Id.*). In response, Stoller amended the claims to recite specific types of PGRs and submitted an accompanying “132 Declaration” (the “Declaration”) from one of the inventors, Ritesh Sheth. In the remarks section of that response, Stoller attempted to differentiate Wang:

Wang requires that addition of an acid solubilizer such as citric acid, tartaric acid, or glycolic acid. Applicant hereby submits [a Declaration] showing that the presently claimed formulation is not stable with the addition of these acid solubilizers. Therefore, one of skill in the art would not look to any teaching from the Wang publication in arriving at the present invention.

(Doc. No. 74-3 at 65). The Declaration itself expounded:

Applicant’s invention is a non-aqueous solution comprising a PGR mixture in organic solvent(s). As such, our invention does not include any acid solubilizes such as citric acid, tartaric acid or glycolic acid . . . . We conducted several experimental trials in order to produce a stable formulation. During these trials we added acid to the formulation and found it wholly unsuitable for the present non-aqueous solution.

(*Id.* at 69).

On July 26, 2017, the Examiner again rejected the pending claims, but this time as obvious over Wang in view of Liptay *et al.* (US 2008/0039322A1). (Doc. No. 74-4 at 7). The Examiner responded to the Declaration, noting that “such is not found persuasive.” (*Id.* at 16). In response, Stoller amended all the pending claims to recite that the claimed non-aqueous solutions were “stable,” and added specific PGR ranges of .005 to 1 wt. % auxin, 0-0.165 wt. % cytokinin, and

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<sup>1</sup> This prior art reference will be referred to in shorthand as “Wang,” mirroring the Examiner’s and the parties’ usage.

0.011 wt. % gibberellin, as well as up to 5 wt. % water. (*Id.* at 27–28, 33–33). In its remarks, Stoller again tried to distinguish its claimed solutions from Wang, explaining that “Wang’s required use of ‘at least one solubilizer selected from the group consisting of citric acid, tartaric acid and glycolic acid’ would make the claimed solution unstable.” (*Id.* at 36). In the following office action, the Examiner withdrew her rejections based on Wang, citing “Applicant’s amendment wherein the claims now disclose that the claimed solution includes [specific PGR ranges.]” (*Id.* at 62).

The prosecution history makes clear that Stoller repeatedly and unequivocally distinguished its claimed “stable” formations from Wang by arguing that Wang’s use of acid solubilizers renders its claimed formulations “unstable.” Contrary to Stoller’s arguments here, the history recounted above illustrates that Stoller’s statements disavowing “acid solubilizers such as citric acid” is not limited to merely the Declaration; it appears in several of Stoller’s responses and/or explanations to its amendments. Moreover, an applicant’s argument that a prior art reference is distinguishable on a particular ground can serve as a disclaimer of claim scope even if the applicant distinguishes the reference on other grounds as well. *Am. Piledriving Equip., Inc. v. Geoquip, Inc.*, 637 F.3d 1324, 1336 (Fed. Cir. 2011). Stoller’s contention that the Examiner’s rejections over Wang were “overcome not because of any statement in the Declaration, but because in later amendments the claims were narrowed to include the PGR ranges in the issued claims” (Doc. No. 73 at 17) is neither instructive nor dispositive here. The Federal Circuit has held that an applicant’s argument made during prosecution may lead to a disavowal of claim scope even if the Examiner did not rely on the argument. *Seachange Int’l, Inc. v. C-COR Inc.*, 413 F.3d 1361, 1374 (Fed. Cir. 2005); *see also Geoquip*, 637 F.3d at 1336 (“Regardless of whether the examiner agreed with [Plaintiff’s] arguments concerning “[claim term],” its statements still inform the proper

construction of the term.”) (cleaned up). Stoller unambiguously contended in its arguments during the prosecution history that “stable” excludes acid solubilizers, such as citric acid, tartaric acid, and glycolic acid, and it cannot now distance itself from the disavowal of broader claim scope.

Accordingly, Stoller’s statements demonstrate that acid solubilizers such as citric acid would render its solutions not “stable” and are therefore beyond the scope of the claimed solutions. As a result, a POSA would appreciate that Stoller’s use of the term “stable” excluded those compounds from its claimed solutions.

The remaining difference between the proposed constructions of the term “stable” concerns the EPA guidelines on stability. The parties appear to agree that the meaning of the term “stable” is based upon the EPA guidelines on stability, as it is referenced in both parties’ proposed constructions. Stoller, however, adds the qualifier that the term “preserves more biochemical activity compared to the traditional aqueous compositions” in relation to the EPA guidelines on stability, and argues that this reflects a POSA’s understanding of the plain and ordinary meaning of the term. The Court disagrees with Stoller’s contention.

The specification—the patent’s written description and figures illustrating the invention—relies on the EPA guidelines, but does not rely on any comparison. The ’883 Patent itself describes stability with reference to the EPA guidelines. When Stoller added the term “stable” to the claims, it submitted that the term is “described” in the application in Paragraph 45. (Doc. No. 74-4 at 33).<sup>2</sup> Paragraph 45 does not provide a definition of “stable,” but rather provides examples of stability studies, all pursuant to the EPA guidelines.’833 Patent col. 10 ll. 9–21.<sup>3</sup> Referring to certain “stability studies” tables, the paragraph asserts:

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<sup>2</sup> Paragraph 45 of the prosecution history is also located ’833 Patent col. 10 ll. 9–14.

<sup>3</sup> Stoller also stated that support for the amended claim could be found in Paragraph 17. Paragraph 17, located at ’833 Patent col. 4 ll. 44–46, merely states that “[t]his *improved* stability of the non-aqueous solutions preserves more



The EPA Guidelines on Stability that issued on Nov. 16, 2012 to the Office of Pesticide Programs (OPP) relating to “Accelerated Storage Stability and Corrosion Characteristics Study Protocol” were followed. As proved in the EPA guidelines, accelerated storage stability can be used to fulfill EPA data requirements. OPP has determined that this study, conducted for 14 days at an elevated temperature (54 ° C.), provides adequate data in certain circumstances to allow EPA to make a regulatory finding regarding the stability of the product and the effect of the formulation on the product packaging.

Critically, nothing in Paragraph 45 refers to or relies on any comparisons. Moreover, Stoller’s own expert, Dr. Prestwich, testified that “the word stable is, stable is stable. And whether it is enhanced or improved is a different concept.” (Doc. No. 79-4 at 31). Stoller has cited no persuasive intrinsic or extrinsic support for the argument that a POSA would understand “stable” as “preserv[ing] more biochemical activity compared to the traditional aqueous compositions” according to the EPA stability guidelines, instead of just merely satisfying the EPA stability guidelines.

Having found that the prosecution history indicates that Stoller clearly and unambiguously disclaimed the full scope of the term “stable” during prosecution and that Stoller’s own proposed construction modifies the plain and ordinary meaning, the Court adopts Fine’s proposed claim construction.

#### B. Various Forms of Zeatin

The term “various forms of zeatin” is used in claim 9 in the ’883 Patent: “The non-aqueous solution of claim 2, wherein said cytokinin is selected from the group consisting of zeatin, various forms of zeatin . . . and mixtures thereof.” ’833 Patent col. 13 ll. 45–50. The table below illustrates the parties’ positions on construction:

| Stoller’s proposed construction                                                            | Fine’s proposed construction |
|--------------------------------------------------------------------------------------------|------------------------------|
| Plain and Ordinary Meaning. Alternatively, other forms of zeatin having cytokinin activity | No construction is possible  |

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biochemical activity compared to the traditional aqueous compositions.” Reference to improved stability, however, is not instructive as to the definition of the term “stable.”

Fine argues that it is impossible to construe “various forms of zeatin,” and the term is indefinite under 35 U.S.C. § 112, ¶ 2. Stoller argues that the patent provides ample support to POSA of its meaning, citing to part of the patent and to Dr. Prestwich’s report.

In *Nautilus, Inc. v. Biosig Instruments, Inc.*, the Supreme Court held that definiteness requires “that a patent’s claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty.” 572 U.S. 898, 910 (2014). Stoller has not directed this Court to any support from the specification or prosecution history to suggest that a POSA would be informed with reasonable certainty as to the definition of “various forms of zeatin.” It has not pointed the Court to any definition in the intrinsic evidence, instead citing to a different section of the patent that merely uses the term.

In fact, Stoller’s own expert, Dr. Prestwich, and its previous proposed claim construction betray any semblance of certainty. In the earlier filed Joint Claim Construction Statement, Stoller asserted the term should be construed as “Zeatin and its isomers that have cytokinin activity.” (Doc. No. 68 at 4). Later, in Dr. Prestwich’s deposition, he testified that compound Zeatin-O-glucoside was a “form of zeatin,” (Doc. No. 79-4 at 21, 215:28–216:5) and then later that it was “not an isomer of zeatin.” (*Id.*, 220:12–15). After this testimony, Stoller proposed the instant construction, of “Plain and Ordinary Meaning. Alternatively: other forms of zeatin having cytokinin activity.” As a result of Stoller’s own shifting construction and the lack of intrinsic support, the Court finds that the term “various forms of zeatin” is indefinite under 35 U.S.C. § 112, ¶ 2.

C. Other Chemical Formulations with Cytokinin Activity

The term “other chemical formulations with cytokinin activity” is also in claim 9 in the ’883 Patent: “The non-aqueous solution of claim 2, wherein said cytokinin is selected from the group consisting of zeatin, various forms of zeatin, N6-benzyl adenine . . . other chemical formulations with cytokinin activity, and mixtures thereof.” ’833 Patent col. 13 ll. 45–50. The table below illustrates the parties’ positions on construction:

| Stoller’s proposed construction                                                                       | Fine’s proposed construction |
|-------------------------------------------------------------------------------------------------------|------------------------------|
| substances that behave like the listed cytokinins to promote cell division, or cytokinesis, in plants | No construction is possible  |

Fine argues that no construction is possible under *Nautilus* because a POSA would not be able to understand specifically what is encompassed by the term. *See* 572 U.S. at 910. In particular, it argues that cytokinin activity is varied and broad, and Stoller’s proposed construction does not approach all cytokinin activity. Stoller obviously disagrees and contends that a POSA would understand from the context of the patent that the term refers to other cytokinins that specifically promote cell division in plants.

The Court adopts Stoller’s proposed construction. The ’883 Patent itself instructs that plants “must receive various naturally-occurring nutrients and/or phytohormones in specific concentrations, at specific times during the plant’s growth, and to specific parts or tissues of the plant.” ’883 Patent col. 2 ll. 2–5. These phytohormones include cytokinin, which “stimulate growth of lateral buds lower on the stem, promote cell division and leaf expansion and retard plant aging.” ’883 Patent col. 2 ll. 20–24. The patent specification makes clear that the thrust of the patent is to make it easier to grow plants, not inhibit their activity. Thus, a POSA would understand that reference to “other chemical formulations with cytokinin activity” means substances that promote

cell division in plants, rather than other irrelevant substances.

Fine's argument that the term is "not amenable to any construction" (Doc. No. 79 at 24) is further undermined by their own use of the term in their promotional materials. (Doc. No. 74, Ex. C). While promotional materials may not be subject to the same level of scrutiny as a patent term, it is common sense that Fine's own use of the term suggests that the term may be readily understandable to a POSA. Fine has not brought forth any intrinsic support, relying instead only on their own expert testimony, for the proposition that a POSA would not be able to construe the term "other chemical formulations with cytokinin activity" in the '883 Patent. Accordingly, Stoller's construction is adopted.

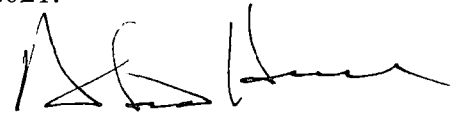
#### IV. Conclusion

The Court has considered the evidence in the record. The Court also has considered the parties' oral arguments and explanations during the *Markman* hearing, which the Court found very helpful and informative. Based on this consideration of the evidence and the parties' arguments, as well as the application of governing claim construction principles, the Court construes the terms and phrases as described in the foregoing, and as summarized in the table below:

| Disputed Term                                         | Court's Construction                                                                                                        |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| "stable"                                              | satisfies the EPA Stability Guidelines and excludes acid solubilizers, such as citric acid, tartaric acid, or glycolic acid |
| "various forms of zeatin"                             | indefinite                                                                                                                  |
| "other chemical formulations with cytokinin activity" | substances that behave like the listed cytokinins to promote cell division, or cytokinesis, in plants                       |

It is **SO ORDERED**.

Signed at Houston, Texas, this 16<sup>th</sup> day of August, 2021.

A handwritten signature in black ink, appearing to read 'Andrew S. Hanen', written over a horizontal line.

Andrew S. Hanen  
United States District Judge